

REMARKS

Applicants wish to express sincere thanks to the Examiner for a thorough examination of this application. The provisional election of claims 1 to 13 to continue prosecution in this case is affirmed, with claims 14 to 26 withdrawn without prejudice for consideration in a later divisional application.

The provisional rejection of claims 1, 4, 5, 7 and 11 under the judicially created doctrine of obviousness-type double patenting based on co-pending application no. 10/761,953 is traversed by filing a provisional terminal disclaimer with regard to Patent Application No. 10/761,953. Both this application and Application No. 10/761,953 are assigned to the same entity, Nucor Corporation.

Claims 2, 4, 6, 10, and 12 have been found allowable if put in independent form. Applicants respectfully submit that that is not necessary since the claims upon which those claims depend should be allowed in view of the present Response.

Claims 1, 2, 5, 7, 8, 11 and 13 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Kumai, et al. U.S. Patent No. 4,073,643. The '643 patent discloses a method for production of continuously cast steel slab for use in manufacturing steel sheet having excellent workability, which comprises blowing molten steel to a total oxygen content of between 600 ppm and 1600 ppm and not less than 150 ppm of free oxygen with a reduced content of silicon inclusions. Other steps and specific parameters are required for the steel. In the Example describing samples A through H, it is noted that the total oxygen content of the molten steel is between 450 and 580 ppm and the free oxygen content "no more than 100 ppm." Col. 8, ll. 49-50; Col. 9, l. 4. There is no disclosure or suggestion of any particular free oxygen content in the molten steel described in the '643 patent below 100 ppm.

By contrast, the presently claimed method of making a steel strip by continuous casting requires introducing molten low carbon steel having a total oxygen content of at least 70 ppm and free oxygen content between 20 and 60 ppm (claims 7-13) or having a total oxygen content of at least 100 ppm and a free oxygen content between 30 and 50 ppm (claims 1-6). There is no disclosure in the patent '643 of sufficient specificity to constitute an anticipation under § 102 of the patent statute. Where as here the claims are directed to a narrow range and the referenced '643 patent is directed to a broad range, and there is, as in this case, evidence of unexpected results within the claimed narrow range, "the narrow range is not disclosed with 'sufficient specificity' to constitute anticipation of the claims." MPEP § 2131.03.

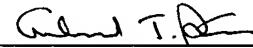
Plainly, there is no motivation based upon the teachings of the '643 patent which would suggest, let alone disclose, the specific range of total oxygen and free oxygen specified by the presently claimed invention. Indeed, the data provided in this application discloses the unexpected results in continuous casting of thin cast strip with the total oxygen and the free oxygen contents specified by the present claims. *See* p. 9, l. 30 *et seq.* Accordingly, applicants respectfully request that claims 1-13 be allowed, and the application be passed to issue.

Claims 3 and 9 are rejected under 35 USC § 103(a) as being unpatentable over Kumai et al. (US-943), and further in view of Strezov et al. (US-2003/0000679). However, Strezov (US-2003) does not contain any disclosure filling in the deficiencies of Kumai '643 noted above. Accordingly, claims 3 and 9 should also be allowed in the application passed to issue.

A check is enclosed for \$130 representing the fee for the terminal disclaimer. It is believed that there are no other fees due in conjunction with this submission, but applicants now authorize the Commissioner to charge any additional fees that may be due, or to credit any overpayment in fees, to the account of Barnes & Thornburg LLP, Deposit Account No. 10-0435 with reference to our matter 29685-74363.

Respectfully submitted,

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